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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,823	08/01/2001	Tomohiro Okumura	2001_1089A	4423

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WASHINGTON, DC 20006-1021

EXAMINER

PHAN, THO GIA

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,823

Applicant(s)

OKUMURA ET AL.

Examiner

Tho G. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification and the claims.

Claim Rejections - 35 USC § 112

1. Claims 1-40 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 4, the language, "the dielectric plate" lacks a proper antecedent basis.

In claim 2, line 7, the language, "the dielectric plate" lacks a proper antecedent basis.

It is unclear what is "a substrate" (see claim 3, line 2), and how it relates to "a substrate" of claim 1, line 9.

In claim 3, line 4, the language, "the antenna" lacks a proper antecedent basis.

It is unclear what is "a substrate" (see claim 4, line 2), and how it relates to "a substrate" of claim 1, line 9.

In claim 4, line 4, the language, "the antenna" lacks a proper antecedent basis.

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It is unclear what is "a substrate" (see claim 21, line 2), and how it relates to "a substrate" of claim 18, line 8.

In claim 24, line 2, it is unclear what is meant by "capable of".

In claim 25, line 3, the language, "the facing electrode" lacks a proper antecedent basis.

In claim 26, line 5, the language, "the metal plate" lacks a proper antecedent basis.

In claim 26, line 5, the language, "the facing electrode" lacks a proper antecedent basis.

In claim 27, line 3, the language, "the facing electrode" lacks a proper antecedent basis.

In claim 28, line 3, the language, "the facing electrode" lacks a proper antecedent basis.

In claim 29, line 2, the language, "it" lacks a proper antecedent basis.

In claim 29, line 3, the language, "the facing electrode" lacks a proper antecedent basis.

In claim 32, line 3, the language, "the facing electrode" lacks a proper antecedent basis.

In claim 34, line 5, the language, "the metal plate" lacks a proper antecedent basis.

In claim 37, line 2, the language, "it" lacks a proper antecedent basis.

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In claim 37, line 3, the language, "the facing electrode" lacks a proper antecedent basis.

Double Patenting

The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornam*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (b) and © may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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2. Claims 1-40 are rejected under the judicially created doctrine of double patenting over the U. S. Patent No. 6,346,915 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is **fully disclosed in the patent and is covered by the patent.**

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Tsukamoto (5,868,848).

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Tsukamoto in figures 1-3 discloses a plasma processing method 1 comprising the step of introducing a gas into a vacuum chamber 2 through a hole of a dielectric tube attached to a metal body fixed to the vacuum chamber while exhausting from the vacuum chamber to keep the vacuum chamber within a specified pressure and applying high frequency power with a frequency to a plasma source provided so as to face a substrate mounted on a substrate electrode in the vacuum chamber to generate plasma in the vacuum chamber. Tsukamoto has been discussed but fails to expressly teaches the specific bands of operation as claimed. However, the specific bands of operation would have been obvious in the art. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to employ a frequency ranging from 100KHz to 3GHz into Tsukamoto for the purpose of further improving to perform plasma processing of the substrate.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

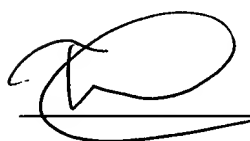
The patents to Koshimizu, Ra, Okumura et al and Sato et al are cited as of interest and illustrate a similar structure to a plasma processing apparatus.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner THO G. PHAN whose telephone number is (703) 308-3051.

7. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

8. Papers related to Technology Center 2800 applications **only** may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.



THO PHAN
PRIMARY EXAMINER

THO G. PHAN

Patent Examiner

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August 23, 2002